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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,759	10/02/2001	Guido Heirbaut	016782-0232	8740

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EXAMINER

BOYD, JENNIFER A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/869,759

Examiner

Jennifer A Boyd

FILE
Applicant(s)

HEIRBAUT ET AL.

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 17 provides for the use of the knitted fabric, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 17 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1771

5. Claims 1, 2, 6 – 7 and 12 – 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Tominaga (EP 477,785 A2).

Tominaga is directed to a sheet for molding glass.

As to claims 1 and 18, Tominaga teaches a knitted fabric comprising stainless steel filaments (Abstract). In the Applicant's Specification (page 6, lines 25 – 31), it is taught that in order to obtain more than 90 stitches per cm^2 , a gauge of 16 or more should be used. Tominaga teaches a knitting pitch of 10 to 30 gauge (Abstract), therefore, such a knitted structure would be present.

As to claim 2, Tominaga teaches a knitting pitch of 10 to 30 gauge. In the Applicant's Specification (page 10), it is taught that a knitted fabric with a gauge of 20 or 24 comprising steel yarns with a metric count above 7.5 Nm can result in fabrics with a 100 or more stitches per cm^2 . Tominaga teaches that the stainless steel yarn has a diameter of no more than 50 μm or a linear density of 20 cotton count (column 3, lines 5 – 10 and column 55 – 57). The formula for converting cotton count (Ne) to metric count (Nm) is: $\text{Nm} = \text{Ne} / 1.695$. Therefore, the stainless steel yarn of Tominaga has a metric count of no more than 11.8 Nm.

As to claims 6 and 7, Tominaga teaches that at least one of the two textile yarns are metal, particularly stainless steel (Abstract) fibers, therefore, one embodiment of the knitted fabric can comprise all stainless steel fibers.

As to claims 12 and 13, Tominaga teaches that the knitted fabric has a knitting pitch of 10 to 30 gauge (Abstract and column 3, lines 25 – 27).

Art Unit: 1771

As to claims 14 – 16, Tominaga teaches that the stainless steel yarn has a diameter of no more than 50 μ m or a linear density of 20 cotton count (column 3, lines 5 – 10 and column 55 – 57) or metric count of no more than 11.8 Nm.

As to claim 17, Tominaga teaches the setting of the knitted fabric on a molding surface of a mould to shape glass plates (Abstract).

6. Claims 1, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Lesage et al. (US 5,388,432).

As to claim 1, Lesage teaches a covering composed of a woven or knitted fabric comprising metal and ceramic fibers (column 4, lines 1 – 10 and 29 – 37). In Example 1, Lesage teaches a knit fabric where the distance between the two knitted rows was approximately 1.4 mm (column 5, lines 10 – 15). The distance between the two knitted rows can be equated to a machine gauge of 18.2 stitches/inch. In the Applicant's Specification (page 6, lines 25 – 31), it is taught that in order to obtain more than 90 stitches per cm², a gauge of 16 or more should be used.

As to claim 6, Lesage teaches that it is known in the textile industry that 100% metal yarns may be used in knitted fabrics (column 4, lines 29 – 31).

As to claim 7, Lesage teaches in Example 1 that 316 L stainless steel fibers may be used in the knitted structure (column 5, lines 10 – 15). According to *Marks' Standard Handbook for Mechanical Engineers*, 316L grade of stainless steel fibers contain 16 – 18 % Cr and 10 – 15% Ni.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tominaga (EP 477,785 A2) or Lesage et al. (US 5,388,432).

Although Tominaga or Lesage do not explicitly teach the claimed air permeability higher than $2400 \frac{1}{10} \text{ cm}^2\text{h}$, it is reasonable to presume that an air permeability higher than $2400 \frac{1}{10} \text{ cm}^2\text{h}$ is inherent to Tominaga or Lesage. Support for said presumption is found in the use of like materials (i.e. a knitted fabric comprising stainless steel fibers having 90 or more stitches per square centimeter) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of air permeability higher than $2400 \frac{1}{10} \text{ cm}^2\text{h}$ would obviously have been present once the Tominaga or Lesage product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to providing of this rejection made above under 35 USC 102.

Claim Rejections - 35 USC § 103

9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tominaga (EP 477,785 A2) or Lesage et al. (US 5,388,432).

As to claims 4 and 5, Tominaga or Lesage disclose the claimed invention except for a fabric weight between $600 - 2000 \text{ g/m}^2$ as required by claim 4 and a thickness of more than 0.8

Art Unit: 1771

mm as required by claim 5. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a fabric weight between 600 – 2000 g/m² and a thickness of more than 0.8 mm, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the fabric weight and thickness to create a pliable fabric with a suitable weight to properly mold glass plates.

10. Claims 9 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lesage et al. (US 5,388,432).

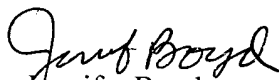
Lesage discloses in Example 1 that the knitted fabric was a jersey-type mesh knit (column 5, lines 10 – 11). Lesage fails to disclose that the jersey knit structures than can be used are 1/2, 1/3 and 1/4 structures. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a knit with 1/2, 1/3 and 1/4 jersey knit structures since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. *In re Leshin*, 125 USPQ 416. In the present invention, one would have been motivated to create a jersey knit with such structure variations as they are commonly known in the art.

Art Unit: 1771

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 703-305-7082. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jennifer Boyd
April 3, 2003